

HIGH FREQUENCY LOSS OF SIGNAL DETECTOR

ABSTRACT OF THE DISCLOSURE

Methods and circuitry for implementing high speed loss-of-signal detectors for use in Gb/s telecommunication applications. The invention measures bit error rate (BER) of the incoming data by comparing the phase of the clock signal extracted from the incoming data with that of a delayed version of the incoming data. The results of this comparison are averaged over time to arrive at the BER. The measured BER is compared to a predetermined threshold value to detect a loss-of-signal condition. The invention adjusts the amount of delay of the incoming data in such a manner as to minimize the capacitive loading on the data line and clock line introduced by the loss-of-signal circuitry.

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